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Alberta

MUNICIPAL AFFAIRS

Innovative Housing Grants Program

A FEASIBILITY STUDY OF INTRODUCING EMERGENCY RESPONSE SYSTEMS TO SENIOR CITIZEN LODGES

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Prepared by:

Woods Gordon
for
The Lutheran Welfare Society

The views and conclusions expressed and the recommendations made in this report are entirely those of the authors and should not be construed as expressing the opinions of Alberta Municipal Affairs.

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FOREWORD

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Innovative Housing Grants Program
Alberta Municipal Affairs
9925 - 107th Street
Edmonton, Alberta
T5K 2H9

Telephone: (403) 427-8150

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EXECUTIVE SUMMARY

OBJECTIVE

A six month pilot study to assess the feasibility of implementing emergency call systems in Alberta lodges has been completed. The objective of the study is to design, implement and evaluate a pilot project of the Lifeline emergency call system in selected Calgary lodges.

METHODOLOGY

Rundle Lodge and Shouldice Lodge, two lodges under the auspices of the Metropolitan Calgary Foundation, were selected and Lifeline, an emergency call system operated by the Lutheran Welfare Society, was installed. A decision model was developed to assess the project feasibility from both a qualitative and quantitative perspective. Qualitative factors included the effect on residents, the effect on lodge staff and the overall system performance. These were measured primarily via a questionnaire/survey with lodge residents, and personal interviewing with lodge staff, Lutheran Welfare Society staff and related health care practitioners. Quantitative factors included a financial cost benefit analysis and a review of the systems operating performance throughout the pilot period.

ISSUES

The primary issues raised during the study were:

i) would the system provide quality of life improvements to lodge residents?

ii) would the system afford operating cost reductions?

iii) what is the most appropriate system configuration for a lodge?

iv) if feasible, what is the most appropriate organization to implement the system in other Alberta lodges?

MAIN FINDINGS

In our view the pilot project has proved to be very successful with the results indicating such systems are feasible for lodges from both a qualitative and fiscal perspective.

It is clear that the system delivers significant quality of life improvements for lodge residents. Key benefits evident during the pilot include improved safety and security, quickened response time to emergency situations, and overall improved peace of mind for residents. Surveys report a high acceptance of the technology by residents, and interviews indicate a high acceptance level on the part of lodge staff.

Significant savings can be realized by the introduction of emergency call systems to lodges. The ability to eliminate night attendant staffing affords economies of approximately $37,500 per lodge annually. The role of night attendants is primarily to monitor and react to emergency situations in a lodge. This role, in effect becomes redundant with the introduction of emergency call technology.

Savings may also be realized for the overall health care system through a deferment of transferring marginally frail lodge residents to higher care institutions such as nursing homes. Although the pilot period did not allow determination of an exact figure, the authors estimate potential savings to the health care system of between $665,000 to $2,950,000 per year.

CONCLUSIONS

We conclude that emergency response systems can be feasibly implemented in lodges. Key factors for consideration in implementation are:

i) units should be installed in all residents' rooms in a lodge; with units installed in any common bathing or other high risk common areas (e.g. laundry).

ii) development and implementation should be coordinated through the thirty emergency response system networks currently operated throughout the province in conjunction with local lodge foundations.

iii) systems should be standardized on an individual lodge basis.

iv) costs of implementing the system should be the responsibility of the individual lodge foundations due to the sound economics of the investment.

1.0 INTRODUCTION

The use of emergency call systems can provide a technology supported means of assisting elderly or physical disabled people to live independently outside of institutions. Such systems allow the users to call for assistance when a medical or other such emergency arises.

An entire continuum of emergency response systems ranging from ad hoc manual systems to high-tech communications based systems are available. They range from simple "social monitoring" systems such as postal alert; card systems, and "buddy" systems, to highly technical electronic monitoring systems. These range primarily from hard-wired systems (directly built into the dwelling) to two way communications/monitoring systems which utilize existing telephone lines.

Telephone based systems have been designed to alleviate the majority of problems associated with the other types of system; such as slow response to emergencies and high incidences of false alarms.[1] This study will focus on a specific telephone based system - Lifeline.

The Lutheran Welfare Society in Alberta is a non-profit private social agency which provides housing, medical and support services to seniors in the Calgary area. Two of the services offered through the society are lodge accommodation and the "Lifeline" system, which is a user activated emergency assistance call system. Based on its experience with the system to date in the Bethany Care Centre Lodge, the Society believes that introducing the "Lifeline" system to lodges could bring quality of life benefits for residents and potentially reduce lodge operating costs. Further, the availability of a call system may delay

[1] A complete description and technical evaluation of the various forms of emergency call systems is outlined in the Study of Emergency Response Systems for the Elderly prepared for CMHC by Mclaren Plansearch.

the admission of some marginally frail residents to higher and more expensive levels of care such as nursing homes.

This project seeks to evaluate the Lifeline call system in two select lodges in Calgary and assess its suitability for implementation in other lodges throughout the province.

AN IMPORTANT FEATURE OF THE LIFEINE SYSTEM THAT DISTINIGUISHES IT FROM MANY OTHER EMERGENCY CONTACT SYSTEMS IS THAT, WHILE USING THE LATEST EMERGENCY COMMUNICATIONS TECHNOLOGIES, IT RELIES ON HUMAN DECISION MAKING THROUGHOUT THE PROCESS TO ASSESS THE SITUATION AND CARRY OUT APPROPRIATE ACTIONS. This important distinction is outlined in more detail in Section 4.1 of this report.

Appendix A contains a description of the Lutheran Welfare Society's Lifeline system complete with a point by point description of procedures used in responding to an emergency call.

2.0 OBJECTIVES AND SCOPE

The objective of this study is to design, implement and evaluate a pilot project of the Lifeline emergency call system in selected lodges in Calgary. The detailed study objectives are as follows:

1) Review relevant aspects of residents' activities and lifestyle as well as the administration of the two pilot lodges selected. On the basis of that review and other relevant factors, decide on the characteristics and configuration of an emergency-call system which will be used in this study.

2) Establish terms, conditions and criteria for implementing a pilot project and develop an evaluation program sufficient to assess the cost, benefits and other key implications of using the Lifeline call system in lodges in both qualitative and quantitative terms.

3) Implement the pilot project in the two lodges for a minimum of six months.

4) Evaluate the pilot project and extrapolate the findings to provide an assessment of the suitability of applying similar systems in lodges across the province.

5) Document the work in a comprehensive report.

SCOPE

The work will consider the implication of introducing emergency call systems to lodges in Alberta.

3.0 METHODOLOGY

To attain the study objectives the following approach was used over the six month time frame beginning in July, 1988 and ending in January, 1989.

A study team was formed to conduct the pilot study consisting of both Lutheran Welfare Society personnel and Woods Gordon consultants. These were:

Mr. Bob Wardle	Executive Secretary, Lutheran Welfare Society
Ms. Heidi Miller-Zerr	Lifeline Administrator, Bethany Lifeline
Mr. Barney McCoshen	Partner, Woods Gordon
Mr. Patrick Quinlan	Senior Consultant, Woods Gordon

In addition to the above, volunteers were utilized extensively by the project team to carry out specific tasks throughout the study.

Two Calgary lodges were selected in conjunction with the Calgary Metropolitan Board to serve as the pilot lodges for the study. It was decided a telephone-based emergency call system would be used in the pilot lodges. All rooms in the lodges contained telephone jacks and, as noted previously, telephone based systems appear to be the most appropriate and technologically sound systems available.

Bethany Lifeline, a local service sponsored by the Lutheran Welfare Society, provided the equipment and manpower to the pilot project. The Lutheran Welfare Society has an extensive history of four years with such systems and presently has approximately 800 subscribers.

3.1 INSTALLATION

The installation of the units began in August 1988. The steps taken are outlined as follows:

3.1.1 Installation steps:

- Subscriber information collected with help from lodge staff (see Appendix B).
- Units assigned to rooms and subscribers.
- Units installed - wall brackets
  - A/C plugged in
  - phone line plugged in
- Personal orientation and training by installer.
- Test call made using locket.

The lodge facilities where Lifeline units were installed are (a more detailed description of the pilot structure is contained in section 4.2.2):

Shouldice Lodge, a sixty room facility located in Bowness. This lodge is four years old and represents a typical newer lodge in Alberta.

Rundle Lodge, an older forty-four bed lodge is located in Calgary. This lodge is typical of most rural lodges throughout Alberta.

In addition to the above installations, 4 units were installed in the Elbow Valley Lodge. Unlike the two primary pilot lodges, lockets were provided only in the common bathing areas. Residents would wear the water proofed lockets while bathing and return them to a wall bracket outside the bathing areas when finished.

The intention in selecting both an older and newer lodge was to obtain better representation with respect to staffing patterns, layout, resident mix, etc. which allowed for better extrapolation of results throughout the province. More importantly, by installing the system "selectively" in one facility and with 100% coverage in the other, we developed insight as to the most effective application of the system.

The intent in installing four units in common bathing areas at Elbow Valley was to determine the systems effectiveness in providing only minimal coverage in a high risk area.

Meetings were held with the Lifeline coordinator to outline the system functionality. A synopsis of the system and the related emergency call procedures have been documented and are outlined in Appendix A. Emergency call incidents at the pilot lodges throughout the study are included for illustration in Appendix C.

Demographic data on residents within the pilot lodges were collected during Phase I of the pilot project. The standard forms used to tabulate user data (see Appendix B) were sufficient to collect the needed information.

Demographic data on province-wide lodge residents utilized secondary data available from public sources (i.e. OLDER ALBERTANS 1986 - Senior Citizens Secretariat and 1987 ANNUAL LODGE REPORT).

3.2 ASSESSMENT FRAMEWORK

To facilitate the analysis, a decision model was required to incorporate both the quantitative and qualitative aspects of the study. These were as follows:

3.2.1 Quantitative Aspect

A number of financial factors needed to be considered in outlining the financial impact of installing Lifeline in the pilot lodges. The factors considered were:

- o Capital costs
  - Lifeline units
  - lockets
- o Operating costs
  - monthly monitoring charges
- o Staff savings
  - reduction in staff monitoring, on-call time, etc.
- o Deferment savings
  - incremental savings resulting from deferred costs in avoiding transferring elderly from lodges to more expensive care facilities.

No allowance was made for capital costs for additional emergency response centers in this analysis. It is felt that existing local systems could handle the incremental capacity province-wide without any additional emergency response centers being required. Currently twenty-six Lifeline programs and four other emergency response system programs are available throughout the province (see Appendix G).

3.2.2 Qualitative Aspect

A number of qualitative factors were identified as important in improving the overall quality of life of elderly lodge residents. These factors were established in a workshop involving the study team and were generated primarily on the basis of L.W.S. experience with Lifeline subscribers.

The major factors identified were:

i) Effect on Residents

- o client acceptance;
- o security;
- o ability to live independently;
- o response time to emergencies;
- o more comprehensive care (alert staff busy with rounds, meetings, etc.);
- o coverage during the night (when lodge rooms may be locked);
- o support service to lodge staff (contact ambulance, family, etc. while staff tends to emergency);
- o immediate human contact (consoling voice at end of the line provides peace of mind);
- o avoid having elderly residents "running" for help (thus risking injury).

The lodge residents opinion of Lifeline with respect to these and other qualitative factors were measured via a questionnaire conducted near the end of the pilot project. The questionnaire was designed by the project team and interviews were conducted using lodge staff and volunteer help available to the Bethany Lifeline.

In addition, interviews were conducted with a number of health care practitioners including lodge managers and various related care agency officials to assess the qualitative aspects of the system.

ii) Staffing Effects: (non-financial)

- o review of system performance (via interviews) with lodge and Lifeline staff.

iii) System Performance:

- o number of emergency calls;
- o types of emergencies and results:
  - hospital, death, life saved, false alarms, etc.;
- o response times (all Lifeline emergencies).

3.3 STATISTICAL METHODOLOGY

The statistical methodology used in support of this research is as follows:

100% sampling (all residents) was used in the qualitative assessment of the pilot project. All residents linked to Lifeline were interviewed and data compiled on a micro computer (Dbase 3+) model.

In addition, a random sample of existing Lifeline subscribers were selected to be interviewed. A sample of 70 were contacted by volunteers and the same questionnaire was completed. This sample size provides a 95% confidence limit +/- 5% error.

3.4 COST ASSESSMENT

For the purposes of our analysis the following costs were used:

Lifeline

Capital costs: $525 per unit*

Monitoring costs: $23 per month

* For the purposes of all cost analysis in this review, capital costs & monitoring costs were held constant at $525 per unit and $23 per month respectively. No allowance was made for discounting due to volume buying.

Institutional Costs:

Lodge: $16 per day

Nursing home: $55 per day

Auxiliary hospital: $110 per day

Staffing/Administration

Lodge night attendant staff: $25,000 per year (includes benefits, relief & vacation coverage)

4.0 DESCRIPTION OF PILOT PROJECT

The following outlines the results of our research and includes a description of the system, the system structure installed at the two pilot lodges, the design criteria developed to assess performance, the questionnaire results, interview results, the system performance and an overall cost/benefit assessment.

4.1 SYSTEM DESCRIPTION

The hardware for the Lifeline emergency response system utilizes the following:

a) a transmitter (locket);
b) a home unit;
c) a telephone line; and
d) an emergency response center.

(A brochure outlining the technical specifications of the Lifeline system is contained in Appendix E.)

The transmitter is a small remote control device which a resident wears or carries; typically a locket worn on a neckchain or bracelet. This technology allows the person to signal for help immediately when an incident occurs, while not having to be near a telephone or remember emergency telephone numbers in order to get help. The transmitter alerts the home unit located in the user's residence that an emergency has arisen by the resident pressing a button on the transmitter.

The home unit, a receiver/transmitter, communicates with the emergency response center over a telephone line. The central monitoring base has a fully trained operator on duty on a 24 hour-a-day basis.

The system hardware at the emergency response center constantly monitors the network of residents for an emergency signal from any of the home units connected to the system. As noted, a resident in need of help initiates an emergency call by activating their locket. The locket triggers the home unit, providing the user is within the operating range (the pilot unit had an operating range of 75 feet. Other units offer a range of 200 feet). The home unit automatically dials the emergency response center and sends it a digitally coded message. The operator at the center first responds to the alarm by trying to establish the nature of the emergency (medical, fire, burglary, etc.) by dialing the user's phone number. If this attempt fails, the operator follows a procedure established with the user at the time of installation (i.e. calling backup responders - see Appendix A). The necessary contact procedures are displayed on a computer screen at the central base. An appropriate help team is dispatched when an emergency situation (e.g. ambulance, police) has been confirmed.

Lifeline has both a remote control device (locket) for signalling for assistance and a timer initiated non-activity system, where the system is also activated by the failure of the user to regularly use the system as prescribed within a preset period of time. However, the reset switch was felt to be redundant as residents typically meet for daily meals.

Lifeline provides a complete system from the transmitter and home unit to the emergency response center. All components are designed interdependently to work as a single system. Although an exhaustive study of other emergency call systems was not within the scope of this study, it is our understanding that other systems are available that are similar in functionality to the Lifeline units. It is possible that components of other systems could be made compatible with the Lifeline system and vice versa, however mixing components would void product liability insurance and warranties.

A key aspect of the Lifeline system is the human interaction at the first and ongoing stages of the emergency call. On a 24 hour basis, a trained operator assesses the situation and decides on an appropriate course of action. In addition to providing a calming human contact at a time of duress, this personal contact serves to eliminate the incidences of false alarms and needless call out of emergency services (i.e. ambulance/police officers).

4.2 FACILITY DESCRIPTIONS

As noted, the pilot installations were made at both the Shouldice and Rundle Lodges in Calgary. Night attendant coverage, whose functions are described below and in Appendix F, were retained throughout the pilot project (It was not deemed practical at the onset of the project to eliminate night attendant staff for the six month evaluation period. The effect of night attendant staff being retained is outlined in Section 4.3.2). A description of these installations follows.

4.2.1 SHOULDICE

In August of 1988, 20 Lifeline units were installed at Shouldice Lodge, a 60 room facility located in Calgary and operated by the Metropolitan Calgary Foundation. This lodge is four years old and represents

typical newer lodges in Alberta. In addition to individual resident rooms it provides 48 self-contained units.

The lodge is currently staffed on a 24 hour basis. The lodge is supervised by a lodge manager. Night attendants are employed from 1600 hours to 2400 hours and from 2400 hours to 0800 hours primarily to respond to emergencies and provide security. From 1800 hours to 0700 hours, the night attendant provides sole coverage at the lodge. (Complete job descriptions for lodge staff are provided in Appendix F.)

Shouldice has single rooms plus some self-contained apartments. All rooms are provided with telephones. Lifeline units were installed in seventeen rooms together with three units in self contained units.

Residents were selectively chosen by lodge staff to participate in this study on the basis of perceived need. Most typically the level of the resident's frailty was the basis of the assessment.

The "selectivity" of the chosen residents in itself became an issue to be addressed. By choosing one resident over another a social pecking order was created that needed to be addressed. This point is discussed in section 4.3.3.

4.2.2 RUNDLE

In August of 1988, 49 Lifeline units were installed in the Rundle Lodge, an older 44 bed facility located in Calgary and operated under the Metropolitan Calgary Foundation. This lodge is typical of most older lodges in Alberta.

As with Shouldice, the lodge is supervised by a lodge manager. Night attendant coverage follows the same 1600 to 2400 hour and 2400 to 0800 hour staffing with similar duties. Lifeline units were installed in all 44 resident rooms, 4 in common bathing areas, and 1 in a common laundry area.

As noted, Lifeline units were installed in all resident rooms at Rundle. By having this configuration as well as "selective" configuration at Shouldice, the study team hoped to gain insight into the most effective means of installing units in lodges.

4.3 ANALYSIS & FINDINGS

4.3.1 DESIGN CRITERIA

In order to assess the residents' response to using the Lifeline system,, a number of potential benefits or factors deemed important to elderly residents were developed in a workshop with the project team. These factors served as the basis for the questionnaire and were:

- profile of lodge residents:
  - age, sex, disability, length of time on system, whether or not they have used the system.
- features most liked/disliked.
- quality of life factors:
  - security
  - independence

- need for human contact in emergency
- responsiveness to emergencies
- family "contentment"
- simplicity of use
- invasion of privacy
- emergency coverage at night
- deferment in transfer to care facilities
- continuance of project after pilot
- costs
- source of payment

These factors were developed into a questionnaire to be used to survey the Lifeline users. The actual questionnaire used is contained in Appendix D. Due to the limited time frame available to the pilot (five months) and the relatively small number of pilot users, it was decided to also survey a random sample of Bethany Lifeline users from the community at large. (For the purposes of this report PILOT group will refer to those residents in the Shouldice and Rundle lodges. NON-PILOT group will refer to the random sample of current Lifeline subscribers.)

The benefit in surveying "non-pilot" users was four-fold:

i) to gain input from longer term (average nineteen months) users of the system;

ii) to survey a larger population base with similar demographics;

iii) to test the validity and practicality of the questionnaire.

iv) to approximate pilot resident response given a higher level of independent living (i.e. without night attendant coverage).

The results of the survey are outlined in the next section.

4.3.2 QUESTIONNAIRE RESULTS

The results of the survey are as follows:

Resident profile:

Non-pilot group:

Number of respondents	60	
Number of male:	9	(15%)
Number of female:	51	(85%)
Number with disabilities:	39	(65%)
Average age: 77.2 years		
Average time on Lifeline:	18.5 months	
Have used Lifeline for assistance:	10	(17%)

Pilot Group:

Number of respondents	54	
Number of male:	17	(31%)
Number of female:	37	(69%)
Number with disabilities:	18	(34%)
Average age: 81.7 years		
Average time on Lifeline:	5.0 months	
Have used Lifeline for assistance:	3	(6%)

The respondents were asked whether they agreed with, disagreed with or were unsure of a number of statements. The responses are outlined as follows (relevant questionnaire numbers are noted as Q#.#):

Q2.0 LIKED MOST ABOUT LIFELINE?

Non-Pilot:		Pilot:	
1. Security/safety	60%	1. Security/safety	30%
2. Help/assistance	23%	2. Help/assistance	11%
3. Peace of mind/comfort	20%	3. Peace of mind/comfort	9%

The results indicate a strong perception that Lifeline can provide needed security, help and peace of mind to non-pilot users. The same features are ranked in the same priority by the pilot group. A number of residents (23 or 42%) did not comment as they felt they did not know enough about the system (i.e. hadn't used it). Considering only those that did respond the percentages become 52%, 20% and 16% respectively for these three features in the pilot group.

Q3.0 LIKE LEAST ABOUT LIFELINE:

Non-Pilot:		Pilot:	
1. Locket/chain	28%	1. Locket/chain	8%
2. Reset button	16%		

The most bothersome feature of Lifeline noted was having to wear the locket on a chain around the neck. For the pilot group the chain was less of a problem as the residents only wear the locket when they are alone in their rooms (see following point).

Q4.0 WEAR LIFELINE LOCKET AT ALL TIMES:

Non-Pilot:		Pilot:	
Yes	68%	Yes	4%
No	32%	No	96%

Lodge residents typically only wear locket when they are alone in their rooms.

Q5.1 LIFELINE PROVIDES ME WITH A BETTER OVERALL QUALITY OF LIFE?

	Agree	Disagree	Unsure
Non-pilot	77%	5%	18%
Pilot	31%	43%	26%

The pilot residents indicated a higher level of confusion with respect to the term "quality of life". In addition pilot residents may not be convinced of the benefits in terms of general quality of life improvements. This may be due to the lesser degree of independence among pilot users than among non-pilot users.

Q5.2 LIFELINE MAKES ME FEEL MORE SECURE IN MY RESIDENCE?

	Agree	Disagree	Unsure
Non-pilot	93%	3%	3%
Pilot	56%	33%	11%

The pilot group felt less positive about this feature. However, agreement outnumbered disagreement nearly 2 to 1. This response reflects the fact that pilot users live less independently and more securely than non-pilot users.

Q5.3 LIFELINE ALLOWS ME TO LIVE MORE INDEPENDENTLY?

	Agree	Disagree	Unsure
Non-pilot	83%	5%	12%
Pilot	35%	48%	17%

Due to the provision of lodge staffing on a 24 hour basis throughout the pilot period (including night coverage), increased independence was not considered a benefit by approximately one-half the pilot residents surveyed. Non-pilot users have more independence (i.e. live alone) and typically have less daily contact with others (except for residents in self contained units) than pilot residents. Therefore, non-pilot user's ability to continue living independently is aided more by the system and thus their response is significantly more positive.

Q5.4 I LIKE THE IMMEDIATE HUMAN CONTACT LIFELINE CAN PROVIDE?

	Agree	Disagree	Unsure
Non-pilot	87%	2%	11%
Pilot	57%	20%	23%

Positive perception of the benefit of having an immediate human contact with Lifeline staff following an emergency.

Q5.5 LIFELINE CAN PROVIDE ME WITH FASTER RESPONSE TO EMERGENCIES THAN ANY OTHER SOURCE?

	Agree	Disagree	Unsure
Non-pilot	82%	2%	17%
Pilot	57%	24%	19%

Positive perception and understanding of ability of the system to provide fast response. The lodge staff was the main alternative in responding to emergencies for the pilot group. The key concern of residents was response to emergencies at night (see question 5.9).

Q5.6 PEOPLE ARE CONTENT KNOWING THAT THEIR ELDERLY FRIENDS OR RELATIVES ARE ON LIFELINE?

	Agree	Disagree	Unsure
Non-pilot	97%	0%	3%
Pilot	50%	15%	35%

A significant number of the pilot respondents (one-third) were unsure as to how friends and family felt as they were mainly unaware of the system. Positive responses, however, outnumbered negative responses better than 3 to 1. Lodge staff offer the opinion that the system would be attractive to many families concerned with the level of care provided by lodges.

Q5.7 LIFELINE IS SIMPLE TO USE?

	Agree	Disagree	Unsure
Non-pilot	100%	0%	0%
Pilot	91%	0%	9%

No residents report any difficulty in understanding and using the system. This is a key factor in the introduction of any new technology.

Q5.8 LIFELINE IS NOT AN INVASION OF MY PRIVACY?

	Agree	Disagree	Unsure
Non-pilot	92%	2%	6%
Pilot	84%	9%	7%

Vast majority of residents do not feel the system invades their privacy. This is an important factor in measuring resident acceptance of the system.

Q5.9 LIFELINE CAN PROVIDE BETTER EMERGENCY COVERAGE IN A LODGE DURING THE NIGHT? (lodge residents only)

	Agree	Disagree	Unsure
Pilot	76%	12%	7%

This question was asked only to the pilot lodge residents. Their responses strongly emphasize the system's ability to provide improved coverage for emergencies at night compared with the response of night attendant staff.

Q5.10 LIFELINE CAN HELP PREVENT RESIDENTS FROM MOVING FROM A LODGE TO A NURSING HOME OR AUXILIARY HOSPITAL? (lodge residents only)

	Agree	Disagree	Unsure
Pilot	13%	74%	13%

Only a minority of residents feel that the system can help prevent them from moving to other care facilities. This is consistent with the view that only a small minority of residents would be helped in this manner (e.g. frailty, family concern for well being).

Q5.11 THE LODGE SHOULD CONTINUE THE LIFELINE SYSTEM AFTER THE PILOT STUDY IS COMPLETE? (lodge residents only)

	Agree	Disagree	Unsure
Pilot	56%	18%	26%

Better than 3:1 ratio of endorsement for continuing the program. A higher percentage of positive responses came from the Rundle group (Rundle 58% and Shouldice 47%).

Q5.12 THERE SHOULD BE A CHARGE FOR LIFELINE? (lodge residents only)

	Agree	Disagree	Unsure
Pilot	61%	20%	19%

The majority of respondents believe that there should be a charge for the service.

Q6.0 WHO SHOULD PAY THE LIFELINE COST?

Non-Pilot		Pilot	
Government	25%	Government	43%
Individual	22%	Individual	13%
Shared	53%	Shared	44%

The majority view is that the individual should pay at least a share of the cost.

* * * * *

Following this preliminary analysis, a further analysis was made to assess the relative differences in responses between the Rundle Lodge residents (100% coverage) and the Shouldice Lodge residents ("selective" coverage). (Appendix D contains a complete summary of the differences in responses).

In nearly all categories, the level of acceptance was scored significantly higher by Rundle residents than by Shouldice residents. In followup discussions with staff and with the interviewers, it was determined that some Shouldice residents felt stigmatized by having been selected by staff to use the Lifeline system. Although the majority of the residents appeared to benefit from the system, some resented being "singled out" and stated a preference for the system being included in all residents rooms,"... like a part of the furniture...". This is a key finding in considering the implementation of the system in other lodges.

Of major importance in assessing the feasibility of a system is the degree to which it is accepted by the lodge residents. If the residents do not accept the system, they will not use it and thus the benefits cannot be realized. Overall, the results indicate a high level of acceptance by all of the Lifeline users. The non-pilot group typically responds much more favourably to the system than the pilot group. The major distinction between the pilot and non-pilot groups can be attributed to:

1) Non-pilot group represents longer term users (nineteen months, versus five months) and thus more experienced and familiar with the potential benefits of the system.

2) Non-pilot group live more independently (typically alone in their own residence), have less day to day human contact and therefore their need for assistance is typically greater.

Although the results of the pilot survey indicate an overall positive reaction to the system by the lodge residents, it is likely that the results are significantly understated due primarily to the availability of lodge staff on a 24 hours basis and the relatively short duration of the pilot study. In our view, we would expect the lodge residents acceptance level to more closely track that of the non-pilot group over time and given the elimination of night attendants (i.e. live more independently).

4.3.3 INTERVIEW RESULTS

Interviews were conducted with lodge staff, Metropolitan Foundation staff, and health care professionals from Care West and Home Care throughout the process with respect to the potential of the system in lodges.

In general, all interviewees strongly endorse the system as a means of providing many quality of life benefits to both residents and lodge staff.

Some specific benefits noted were:

- the immediacy of help (i.e. response time) provided by Lifeline, thus avoiding a potentially disastrous scenario whereby a resident's injury could be undetected for a long period. This was felt to be especially important at night (20:00 to 0800 hours) and for residents who live in self contained units.
- extra security for both residents and staff in the event of burglaries, fires, etc.
- assistance in emergencies provided by the Lifeline staff in contacting emergency services, family members, etc.
- peace of mind for both residents and staff from knowing assistance was easily accessible.

- appreciation by family, friends by having the extra security and assistance provided to their elderly relatives

Specific to the Elbow Valley lodges (where units were installed in only the common bathing areas) managers report very high acceptance for both staff and residents. Having extra security in high risk areas such as baths is thought to be much needed and affords both staff and residents peace of mind (especially for these residents not receiving home care bathing assistance). Lodge managers report a strong desire to have the program continued and expanded.

In the pilot lodges, lodge managers agree that Lifeline could feasibly be used to eliminate one and one-half night attendants per lodge as the role becomes redundant given the system's capability to provide security and emergency response (see night attendant job descriptions - Appendix F). Managers voice concern, however, over the total elimination of the human presence at night to which they feel residents have grown accustomed and would prefer a return to "sleepover" night coverage. "Sleepover" refers to the practice wherein lodges were built with a small apartment that was given to a lodge employee in return for their responding to night time emergencies. Consequently this practice does not add to lodge operating costs.

The only practical means of reducing staff would be to install the system in all residents rooms rather than selectively. Otherwise a night attendant is still needed to monitor and respond to non-Lifeline residents needs.

A major point made by the lodge staff is that by having Lifeline units installed in all resident rooms would eliminate the stigmatism felt by some residents of being selectively chosen to use the Lifeline system (i.e. perception of more frailty/illness, etc.). In addition, the difficulty of assessing which resident needs the system more than

another was of concern to the staff. Further, the need to constantly review individual resident needs, given that their state of health can change quickly, was also noted as problematic.

With respect to the systems ability to deter transferring residents to higher care facilities, the responses were mixed. Lodge managers were less optimistic about the systems potential to delay transferring residents. One area of potential however, was residents whose relatives initiate a referral to higher care facilities due to anxiety over frailty or tendency to fall. The interviewees believed Lifeline would largely alleviate these fears and thus avoid such transfers to higher care facilities. Health care professionals were more optimistic as to the potential for deferrment and considered Lifeline in conjunction with Home Care as a significant means of delaying institutionalization of lodge residents.

Lodge staff had no significant complaints about system performance during the pilot period. They, in general, see the system as their own (i.e. high acceptance) and would like to see it continued. One minor negative point was the lodge staff's assigned task of initiating test calls for all units. Staff consider this too time consuming to do in one day and would prefer a staggered testing procedure over, for example, two weeks so as to spread the time commitment over a larger period.

An important point to be considered during any implementation of the system is the question of cost. Lodge staff report a hesitancy on the part of residents to pay for the service. This point was substantiated in the responses in the resident survey whereby the majority of residents suggested the cost be shared by the individual, government or other parties.

4.3.4 SYSTEM PERFORMANCE

The system performance was measured for both the procedures followed and the electronic components (hardware) used.

o Procedures:

Throughout the pilot period, there were 312 calls from the pilot groups. These were broken down as follows:

Emergencies	4
Non-emergencies	38
Test	261
Low battery	7
Other	2

Emergency calls refer to incidents that required call out of emergency services. There were three calls that required emergency action to be taken. This represents approximately 8% of the resident population over a six month period. The average response time to these emergencies was 2.75 minutes (response time is measured from the time a call is received until help arrives at the resident's room and the unit is reset). Appendix C contains complete descriptions of the incidents and the actions taken.

Non-emergency calls refer to calls that were made that did not require any emergency services (i.e. were handled by staff or Lifeline staff). These would include such things as accidental triggering of alarm, bathroom assistance, etc.

Test calls refer to the number of calls made to test the system. The number is typically high at the beginning of an installation.

Low battery calls were made when the home unit operates under backup battery power.

Other refers to calls that were made, but no classification was noted by the operator.

There were no false alarms to outside emergency services as a result of the pilot project. This is due primarily to the human involvement in the decision making process from the onset of an alarm to a resolution of the incident.

o Hardware:

The hardware used to indicate an emergency, signal help, monitor and communicate with residents proved very reliable over the six month pilot. The failure rates noted below are very acceptable and indicate a high quality system with strong technical support. Recent developments to the system, such as outside monitoring devices, voice to voice communication and water proof lockets, indicate a longer term commitment to developing the system to the user's needs.

The total number and type of failure rates reported are outlined below. (No system failures occurred at the pilot lodges. In order to assess the reliability of the overall system an assessment was made of the total malfunctions for all of the Lifeline units currently in use. The following rates are for the approximately 800 subscribers currently on the Lifeline system over the past twelve months):

	Incidents Per Year	Total Population	% Rate
Malfunctions with signalling units.	7	800	0.9

(Malfunctions were identified quickly through standard monitoring/test call procedures and corrected quickly.)

Other disruptions are due to normal maintenance:

Low battery	3	800	0.4
Phone line maintenance	13	800	1.6
Lost locket	1	800	0.125
Broken locket	12	800	1.5
Broken neckchains	4	800	0.5

4.3.5 COST ANALYSIS

As per our analysis the installation of the Lifeline emergency call system provides significant operating cost reduction opportunities for lodges. The potential savings are of two types: (i) reduction in the level of night staff; and (ii) the potential savings to the health care system due to a deferment in transferring residents from lodges to more expensive care facilities such as nursing homes or auxiliary hospitals.

(i) STAFFING SAVINGS

Alberta's senior citizens' lodges are not intended to provide medical care for their residents. However, due to the advanced age and frailty of some residents, need for a care element is growing. One manifestation of this care is the provision of night attendants. These attendants do not provide continuing or active care, but rather are present to provide assistance in the event of personal or medical emergency.

The use of Lifeline systems in lodges has already afforded reduction in night attendant labour. The Bethany Care Center, a thirty room, 60 resident lodge operated by the Lutheran Welfare Society reports significant savings directly attributable to the utilization of the Lifeline emergency call system since its inception in November 1986.

These savings have been realized and are documented as follows for illustration.

It should be noted that the Bethany Care Center has reported no major difficulties with negative resident reaction to replacing night attendant staff. During the implementation period, a communication program was enacted that explained to residents the reasons for introducing the system. This is a key factor to consider in implementing such changes.

Bethany Care Center Lodge - Realized Savings:

Implementation Costs:

- capital equipment	30 units @$525 =	$15,750.00
	30 extra lockets =	3,000.00
	Capital Outlay (Total of above)	$18,750.00

- operational costs

  o monitoring fees $23/month x 30 units x 12 months = $8,280.00/yr

- staff savings

o 1 full time night attendant	25,000.00
o 1/2 evening attendant	12,500.00
	$37,500.00/yr

Net operating
cost savings = staff savings
less monitoring
costs = ($37,500 - $8,280) = $29,220.00/yr

The initial capital outlay of $18,750 was recovered in 7.7 months, after which there is an annual operating cost saving of $29,220 per year.

* * * * *

For the two pilot lodges at Rundle and Shouldice the potential cost savings would be as follows:

Rundle Lodge:

Implementation Costs:

- capital equipment	50 units @ 525.00 =	$26,250.00
- operational costs	monitoring fees - $23.00 per month x 50 units x 12 months =	$13,800.00/yr
- staff savings		
1 full time night attendant		$25,000.00/yr
1/2 evening attendant		$12,500.00/yr
		37,500.00/yr

Net operating
cost savings = staff savings
less monitoring
costs ($37,500 - $13,800) = $23,700.00/yr

The initial capital outlay of $26,250 could be recovered in 13.3 months after which there is an annual operating cost saving of $23,700.

Shouldice Lodge:

The present pilot structure at the Shouldice lodge would represent no potential costs saving due to staff reductions as not all residents have Lifeline units and therefore night attendant coverage could not be eliminated.

If 100% coverage was implemented at Shouldice the following potential savings could be realized:

Implementation costs:

- capital equipment 60 units @ 525 $31,000

- operational costs monitoring fees -
$23.00 per month x 60 units x 12 months $16,560/yr

- staff savings
1 full time night attendant $25,000/yr
1/2 evening attendant 12,500/yr

$37,500/yr

Net operating
cost savings = staff savings
less monitoring
costs = ($37,500 - $16,560) = $20,940/yr

The initial capital outlay of $31,000 could be recovered in 17.8 months after which there is an annual operating cost saving of $20,940.

Please note that the elimination of night and evening attendant coverage would require a return to lodge staff "sleepovers" to respond to emergency alarms unless the lodge is in close proximity to another facility (e.g. Bethany Care Center) with access to security personnel to serve as responders. The "sleepover" staff would be the primary responder in the event of an emergency.

Provincial Projections:

Based on our analysis for a total capital outlay of $4,176,375 the lodge system throughout the province could realize annual savings of approximately $5,025,000 due to the elimination of night attendants less annual monitoring fees of $2,195,580 for a total net annual saving of $2,829,420. Assumed in this analysis are a night attendant staffing for one and one-half shifts throughout the 134 lodges in the provincial lodge program.

These savings are outlined as follows:

(Please note: no assumptions are made for capital discounts available through large volume buying. Lodge data provided by SUMMARY FINDINGS - SENIOR CITIZEN LODGE PROGRAM REVIEW, November 1987)
Capital Costs:

$525 per unit per room x 7,955 lodge rooms in Alberta $4,176,375.00
Operational Costs/Savings

o Monitoring fees
$23 per unit per month x 7,955 units x 12 months $2,195,580.00/yr

o Staff savings

at 1 1/2 full time night attendants per lodge
= $37,500 per staff per year x 134 lodges $5,025,000.00

Net cost savings = ($5,025,000 less $2,195,580) = $2,829,420 per year

(ii) DEFERMENT SAVINGS

In 1986 total of 1,644 persons vacated their lodge residences. Of these 619 vacated in order to receive greater medical, 134 to receive greater personal care and 55 to receive increased supervision for a total of 808 or 49.2% of the moves. In most instances residents moved into a health care facility.

Based on whether these resident moves into an auxiliary hospital or nursing home could be deferred, the incremental cost to the health care system was between $13,271,400 and $29,492,000 due to the differences in costs of lodge accommodation and nursing homes or auxiliary hospitals.[3]

These numbers are based on:

o low estimate
808 residents * (nursing home cost/day - lodge costs/day) * 365 days/year
= 808 * ($55/day - $10/day) * 365
= $13,271,400

3 Based on the incremental cost of:
Lodges = $10 per day Auxiliary hospital = $110 per day
Nursing homes = $55 per day

o high estimate
  808 residents * (auxiliary hospital costs/day - lodge costs/day) * 365 days/year
  = 808 * ($110/day - $10/day) * 365
  = $29,492,000

For each 1% reduction in the transfer of residents from lodges to nursing homes or auxiliary hospital results in an approximate net savings to the health care system of between $133,000 and $295,000 per year.

Due to the short duration of the study it was impossible to detect any statistically significant trend in any deferment rate. Interviews with lodge management, Metropolitan staff and related health care and home care practitioners suggest that a number of transfers could be avoided given the availability of a Lifeline unit. Such transfers would be those that are primarily family-initiated due to a concern for parental security or safety. The availability of Lifeline units are believed to be able to allay such fears and thus defer transfer of the resident. In addition, Lifeline, in conjunction with home care services, is believed to potentially contribute to a decrease in the current transfer rate.

Our expectation would be that a deferment rate of between 5% to 10% would not be unreasonable. Such a rate would translate to a net saving to the health care system of between $665,000 (based on low estimate) and $2,950,000 (based on high estimate) per year.

5.0 CONCLUSIONS

The results of the study are very positive from both a qualitative and fiscal perspective with respect to the feasibility of the Lifeline emergency call system being implemented in senior citizens lodges.

5.1 ACCEPTANCE LEVEL

The acceptance level of the Lifeline system, as measured by the questionnaire survey with residents and interviews with lodge staff, is very high. This factor is a major consideration in introducing new technologies in the lodges. If the system is not accepted (and therefore not used), the considerable quality of life benefits outlined in this report are difficult to realize.

As noted, the two groups of Lifeline users surveyed (both pilot residents and general lifeline users) had varying levels of acceptance as measured by the questionnaire results.

The different levels of endorsement between lodge residents (pilot) and general lifeline users (non-pilot) can be attributed largely to the average length of time the different groups have used the system (i.e. 18 months for non-pilot and 5 months for pilot users) and the higher level of independent living on the part of non-lodge residents (except those lodge residents in self contained units).

Between the two major pilot groups (Rundle and Shouldice Lodge residents) differences in acceptance levels can be attributed largely to the "stigmatism" felt by a number of Shouldice residents who were arbitrarily "selected" to partake in the study due to the staff's perception of their level of frailty. This factor became clear in discussions with Shouldice staff, residents and interviewers.

The "stigmatism" factor has serious consequences for any further implementations in lodges as it directly affects the level of acceptance and thus the attainment of the benefits that the system can deliver.

5.2 SYSTEM PERFORMANCE

The performance of the overall system - both hardware and emergency response procedures, proved very reliable over the five month pilot period.

With respect to hardware, failure rates on equipment were minimal with these few incidents quickly identified and actions taken (see summary results section 4.3.5). These results reflect the overall failure rate of the system at Bethany Lifeline throughout the pilot period.

The procedures followed in identifying and relating to true emergencies proved very sound. This is evident in the responses to the four emergency situations at the Rundle lodge and supported in discussions with lodge staff.

A key factor in the system performance that needs special notation is the level of human involvement (on a 24 hour basis) in identifying and responding to an emergency call from initiation through to action. Not only does the human element provide a soothing, helpful voice to calm an injured or ill resident but by providing human decision making throughout the process, false alarms, which unnecessarily utilize emergency services, are avoided. In our view, any system selected by a lodge should have this feature.

5.3 IMPLEMENTATION

Based on the acknowledged benefits the potential for implementation of the Lifeline system in other lodge facilities is considerable. A number of factors that must be considered during such implementations are offered:

5.3.1 100% Coverage

If implemented the system should be installed in all resident rooms (with extra calling devices provided in any shared bathing facilities).

This provision will avoid the problem of residents being somewhat "stigmatized" by being selected on the basis of perceived need (i.e. frailty).

If all residents have the system the acceptance level is significantly higher. Importantly, 100% coverage avoids having lodge staff constantly monitor and subjectively judge resident's health to determine their need for a system.

In the view of the lodge staff interviewed, the availability of a system in lodges can prove to be a considerable selling tool to potential residents or their relatives who are concerned with the level of care available. Those who may be concerned due to the frailty of their relatives, and their resultant need for assistance in emergencies may have their fears alleviated by the provision of a system that gives 24 hour access to assistance. Thus these people would be less likely to initiate institutionalization for their relatives.

Based on the Bethany Care Center 100% implementation affords the facility the opportunity to eliminate one and one-half night attendant staff. If only partial Lifeline coverage is provided, these cost savings could not be realized.

Another alternative structure to 100% coverage considered in this analysis is to simply install units in high risk common areas and to maintain a small supply (e.g. four to five) of Lifeline units to be installed in residents' rooms on an "as needed" basis at the discretion of the lodge manager. (e.g. when residents are convalescing from hospital stays, short term illnesses, etc.)

The major benefits of such a structure would be the relatively minimal cost of installation together with a minor increase in security in high risk areas. However these benefits, in our view, are greatly outweighed by the associated drawbacks with this configuration:

- The inability of Lifeline operators to identify the resident (and access the residents medical profile) who is needing help.
- The need for lodge staff to be responsible for identifying when a resident requires a unit.
- The major swings in need by residents due to illnesses (e.g. influenza outbreaks).
- The administrative burden on both lodge staff and Lifeline operators to constantly monitor and track the movement of the units and more importantly to update resident medical profiles.

A key feature of the Lifeline system is the ability to immediately identify an individual in need, their location and their medical profile. This alternative structure constrains the benefits of this feature and, in our view, could severely compromise the systems reliability. For illustration, a situation could occur whereby a call for help is received from a unit where both the residents' medical profile and location have not been updated. To compound matters, the responder may not be aware of where the unit has been installed. Such incidents would be quite possible and the results could place a resident requiring emergency assistance at risk.

5.3.2 Potential savings

The potential for financial savings, both to the lodge facility with respect to staff, and to the health care system with respect to deferment in transferring lodge residents to more expensive care facilities, are significant.

Staff savings would result from night attendant coverage being eliminated from 2000 hours to 0800 hours. Under this scenario Lifeline responders will have to be contacted from a nearby facility as is the case at Bethany Care Center. Alternatively, this can be done by a return to a "sleepover" staff mode whereby one staff member resides on site to serve as an emergency responder. This would result in approximately a $37,500 savings per lodge per year. Based on our analysis it appears that smaller lodges may realize greater financial benefits from an implementation of a Lifeline system (due primarily to a smaller capital outlay and monitoring fees to eliminate night attendant staff). This advantage may be offset, however, by volume discounts likely available to larger lodges which have not been considered in this analysis.

An important consideration in realizing night attendant staff savings is the reaction of lodge residents to the staff reduction. Experience at the Bethany Care Center indicates that an open communication with residents outlining the reasons for the changes serves to allay any resident fears and encourage acceptance of the system.

Deferment savings have considerable potential given that 1,600 to 1,700 residents per year transfer from lodges to more expensive health care facilities (i.e. nursing homes and auxiliary hospitals). A 5% to 10% deferment in patients being transferred would result in a potential saving to the health care system of between $665,000 (based on a low estimate) and $2,950,000 (high estimate) per year.

The duration of the pilot study and limited sample size prevents any trend in deferments from being made and thus a firm figure cannot be determined. The reaction to the potential of the system, in deferring transfer of residents to higher care facilities, although mixed, is considered reasonable among the health care practitioners and lodge managers interviewed.

A major consideration is that the Lifeline system, in conjunction with home care services, could reduce the degree of transfers to higher care facilities. It is believed that a key portion of the transfers - those stemming from family initiated referrals to nursing homes - could be significantly reduced due to families feeling more secure knowing that their elderly relatives are safer from mishap.

Although both the potential areas for cost savings stated above are significant, an important point is that a decision on implementing an emergency call system should not be based on a purely financial analysis alone. In our view the pilot results indicate very positive evidence of quality of life improvements for the elderly lodge

residents especially given the relatively short time in which residents were exposed to the system. These must be appropriately considered in any implementation decision.

5.3.3 Organization of System

In our view the most suitable vehicle for developing and implementing the system in other lodge facilities is via existing emergency response system programs. As noted in the text twenty-six Lifeline programs and four non-Lifeline programs currently are operated by non-profit organizations in communities throughout the province. These networks have sufficient capacity to monitor the current lodge population. For other areas, larger response centers such as Bethany Lifeline, could provide monitoring services or local groups could be organized to provide the emergency response system services.

The key is to utilize these cost effective, community responsive groups to coordinate the programs in conjunction with the various lodge foundations. Such a structure allows the systems to be introduced at a lower cost due to the amount of volunteer labour utilized to install, educate and respond to users.

In addition the human element provided by operators who "get to know" the residents on the other end of the line should not be underestimated. Often elderly residents are hesitant to use a system as they may feel they are "bothering" someone. This problem is easily overcome by developing a caring relationship between the local volunteer groups and the lodge residents.

5.3.4 Standardization

Emergency Response Systems should be standardized on an individual lodge basis. This will ensure that within a lodge a single set of operating procedures are used. Other emergency call systems are available that have similar operating characteristics and provide similar benefits to the Lifeline system used in this study. However, by mixing system components together differences in hardware and operating procedures can result in compromising reliability. Overall implementation, operating and training costs could be higher under a multi-system scenario. More importantly however, warranties and product liability insurance would be voided.

5.3.5 Role of Lodge Manager

A key stakeholder in the successful implementation of the system in lodges is the lodge manager/supervisor. This individual can have significant influence on the level of acceptance and thus utilization and realization of the benefits of the system. Efforts must be made to educate and work in conjunction with the lodge manager to ensure a successful implementation. The lodge manager must be assured that the system is provided as a complement to the human resources of the lodge staff - just as any introduction of technology improvements must be. This position is key in re-inforcing to the residents the importance of using the system. Relatedly, efforts should be made to avoid adding any unnecessary tasks to lodge staff's current routine. To this end, test procedures should be staggered over a four week period to avoid any disruption to the staff's daily routine. Alternatively, lodge staff could train residents to initiate their own monthly test calls.

5.3.6 Implementation Costs

The cost of implementing a Lifeline system is not insignificant given the typically tight fiscal constraints under which all lodges operate. However the cost savings potential, in our view, make such an implementation a sound, cost effective investment for any lodge. We conclude that lodges could easily self-fund the implementation of a system given a willingness to make the necessary staff reductions.

Alternatively, lodges and individuals may be able to take advantage of prospective government assistance programs in this field.

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APPENDIX A

LIFELINE SYSTEM SYNOPSIS EMERGENCY CALL PROCEDURES

FACT SHEET

BETHANY LIFELINE

204, 2120 Kensington Road N.W.
Calgary, Alberta
T2N 3R7
(403) 284-0000 Local 380

- Lifeline is an emergency response system designed to help elderly and disabled people remain in their own home for as long as possible without risk to their safety or health.

- It is a safeguard against medical and other emergencies, and gives peace of mind to the users, their families and friends. Help is available 24 hours a day.

- Lifeline is ideal for people who live alone in their homes, have health problems or who have just come home from hospital.

- Started in February 1985, the number of Subscribers has doubled each year. As of January 1, 1989 subscribers number over 780.

- Several satellite programs have been set up through service clubs and other organizations in such places as Vulcan, Oyen, Fort Macleod, Canmore/Banff, Turner Valley/Black Diamond, Hanna, Castor, Alliance, Carstairs and Madden.

- Bethany Lifeline has been lauded as Lifeline's most effective, successful and efficient program in terms of donor and volunteer support. Today it is also the second largest Lifeline Program in North America.

- Capital equipment is funded primarily through the generosity of corporate donors, individual donors and service clubs. Lifeline is

operated to a great extent by volunteers:

780	Subscribers
2350	Volunteer Responders
90	Volunteers
2	Full-time staff
8	Part-time staff
1	Relief staff

- Lifeline is available on the basis of need to any person - young or old.

- In 1987 Lifeline responded to 300 emergency calls.

- Governed by a volunteer Board of Trustees, Lifeline is operated as a division of the Lutheran Welfare Society.

STEPS FOR LIFELINE

1. Subscriber pushes a button on a locket worn around the neck.

2. Lifeline unit is activated, it dials the Emergency Response Centre and gives a help needed signal.

3. The Response Centre identifies the Subscriber calling for help.

4. The staff person on duty calls the Subscriber. If there is an answer, the Subscriber is asked what help they need.

5. However, if there is no answer or if help is needed, a responder is immediately called.

6. The responder who has pre-arranged access, goes to the Subscriber's home.

7. The responder presses a button on the Lifeline home unit. This signals their arrival to the Response Centre.

8. The person on duty again calls the home to assess whether further action is needed.

9. If needed, the Response Centre personnel will have an ambulance sent.

- Lifeline assures calls for help are answered immediately
  - usually 4 minutes or less.

- Each home unit has a backup timing device that will call for help on its own if the Subscriber does not reset it every day.

- Bethany Lifeline is a self-supporting, non-profit community service operated by the Lutheran Welfare Society.

APPENDIX B

SUBSCRIBER DATA

☆ new file
☐ change

Client # BP0069
Reference next door

INSTALLATION WORKSHEET

SUBSCRIBER# 545 | NAME [redacted] | TEL:# 286-9926

SUBSCRIBER INFORMATION CARD

ADDRESS
[redacted]
Shouldice Manor
3003-46 St N.W. Calgary
730-1B3

TIMER ☐ ☐ ☐ no 12 24
DATE Aug 5/88

REMARKS:

BILLING ADDRESS:
ATTN:

BIRTHDATE:
May 15. 1900

RESPONDERS

NAME: Lodge Staff — HOME:
ADDRESS: — OFFICE: 288-7977
24 hrs. — KEY (Y) N

NAME: — HOME:
ADDRESS: — OFFICE:
KEY Y N

NAME: — HOME:
ADDRESS: — OFFICE:
KEY Y N

NAME: — HOME:
ADDRESS: — OFFICE:
KEY Y N

NAME: — HOME:
ADDRESS: — OFFICE:
KEY Y N

NAME: [redacted] — HOME: [redacted]
ADDRESS: — OFFICE:
(daughter) — KEY Y N

POLICE EMS FIRE

MEDICAL NOTES:

ALLERGIES: ~~~ Dust. herbicides. fluff

MEDICATION: Isoptil. Capoten. Lasix. Potassium. Indosid.

DISABILITIES: Heart condition

REMARKS:

PHYSICIAN: Dr. Anne Duff TEL:# 289-8411
ADDRESS: 200-3604-52 Ave N.W.
Calgary T2L-1V9

PHYSICIAN: TEL:#
ADDRESS:

HOSPITAL PREFERENCE:
Foothills

Referred by:
Finances discussed:
ENTERED:

INSTALLATION FEE: $
MONITORING FEE: $
DATE: Aug 5/88
COMMENCEMENT
TERMINATION DATE: Aug 1/88

BETHANY LIFELINE

APPENDIX C

TYPICAL EMERGENCY INCIDENTS

LIFELINE®

EMERGENCY INCIDENT REPORT

Subscriber Name: [redacted] Subscriber No: 5463

SEQUENCE OF EVENTS: DATE OF INCIDENT: August 23, 1988

Initial Contact: (Code 2) HELP NEEDED /✓/ Time: 4:17

(Code 5) INACTIVITY ALARM /_/ Time:

Phone Contact: With Subscriber Time:

With Responder Time: 4:17

Name of Responder: Bundle Lodge Staff

Responder arrived: Time: 4:20

HOME UNIT RESET Time: 4:20

Phone Contact: With Subscriber Time:

With Responder Time: 4:21

Briefly describe the emergency situation and make any other comments which you feel are pertinent: [redacted] fell getting out of bed again. He apparently injured his leg. Called the ambulance. The ambulance arrived at 4:25. They took Mr. [redacted] to General Hospital. The Lifeline unit is set on Away.

Subscriber remained at home:

Subscriber went to hospital: ✓ General Hospital

Other (explain):

Date of report: Aug 23/88

Emergency Response Center Operator on duty

FORWARD TO PROGRAM COORDINATOR AT ONCE

040008-2 12/82

© 1982 Lifeline Systems, Inc.

LIFELINE®

EMERGENCY INCIDENT REPORT

Subscriber Name: [redacted] Subscriber No: 5463

SEQUENCE OF EVENTS: DATE OF INCIDENT: August 23, 1988

Initial Contact: (Code 2) HELP NEEDED /V/ Time: 0:28

(Code 5) INACTIVITY ALARM / / Time:

Phone Contact: With Subscriber Time:

With Responder Time: 0:29

Name of Responder: Rundle Lodge Staff

Responder arrived: Time: 0:30

HOME UNIT RESET Time: 0:30

Phone Contact: With Subscriber Time:

With Responder Time: 0:35

Briefly describe the emergency situation and make any other comments which you feel are pertinent: [redacted] lives in another wing from staff phone - that's why contact with responder took so long. [redacted] had fallen & the responder helped him back to bed. He said he was alright & did not want an ambulance. The responder said Mr. [redacted] said he had been lying on the floor for 2 hrs. prior to pressing lifeline button. She said he seemed to be ok & that she would call if she thought he might need medical assistance. The reason it took him so long to call for help is that his lifeline button was not within his reach.

Subscriber remained at home: ✓

Subscriber went to hospital:

Other (explain):

Date of report: Aug 23/88

Emergency Response Center Operator on duty

FORWARD TO PROGRAM COORDINATOR AT ONCE

040008-2 12/82

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LIFELINE®

EMERGENCY INCIDENT REPORT

COMMON AREA

Subscriber Name: JUNDLE LODGE - LAUNDRY ROOM Subscriber No: 5506

SEQUENCE OF EVENTS: DATE OF INCIDENT: 9/24/88

Initial Contact: (Code 2) HELP NEEDED [ ] Time: 9:22

(Code 5) INACTIVITY ALARM [ ] Time: -

Phone Contact: With Subscriber Time: -

With Responder Time: 9:24

Name of Responder: STAFF

Responder arrived: Time: -

HOME UNIT RESET Time: 9:24

Phone Contact: With Subscriber Time: -

With Responder Time: 9:25

Briefly describe the emergency situation and make any other comments which you feel are pertinent:

- PHONED LODGE. I COULD NOT ADVISE PATIENT NAME. STAFF THOUGHT THEY NEEDED AMBULANCE.
- RESET WENT OFF AS I HUNG UP.
- RETHONED LODGE - UNO RESET? (PATIENT = OK) OR (STAFF = HELP STILL NEEDED). JARIFIED: STILL NEEDED
- PHONED AMBULANCE
- PHONED LODGE AGAIN - CONFIRMED AMBULANCE SENT; REQUESTED PHONE CALL BACK TO ADVISE ARRIVAL AND IF RL COULD HELP IN ANY WAY.

CHARLENE REMPHER PHONED BACK TO ADVISE: (1025)

1). STROKE VICTIM (PARALYSIS IN LEFT SIDE BUT FEELING STARTING TO RETURN WHEN AMBULANCE ARRIVED)

2) COMMON AREA UNIT - NOT TO BE RESET TO AWAY

Subscriber remained at home: -

Subscriber went to hospital: HOLLY CROSS 'CUZ THAT'S WHERE AMBULANCE IS FROM.

Other (explain):

Date of report: 9/24/88

L Brenan

Emergency Response Center Operator on duty

FORWARD TO PROGRAM COORDINATOR AT C

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EMERGENCY INCIDENT REPORT

Subscriber Name: [redacted] Subscriber No: 5473

SEQUENCE OF EVENTS: DATE OF INCIDENT: November 14, 1988

Initial Contact: (Code 2) HELP NEEDED /xxx/ Time: 4:16

(Code 5) INACTIVITY ALARM / / Time:

Phone Contact: With Subscriber Time: 4:17

With Responder Time: 4:18

Name of Responder: MAUREEN MILANKO

Responder arrived: Time: 4:19

HOME UNIT RESET Time: 4:20

Phone Contact: With Subscriber Time:

With Responder Time: 4:21

Briefly describe the emergency situation and make any other comments which you feel are pertinent:

When Help Needed call came in I contacted Mr. [redacted] He said there was water running into his room and he was afraid of a flood.
I contacted the staff and had Maureen Milanko check this out. She Reset and then I called her in [redacted] room for confirmation of the flood.

It turned out that the man next door often forgets to turn off the water. This was exactly what he had done again and water was running into [redacted] room under the door from the room next to him.

All is well. The staff are cleaning up the mess and the subscriber asked for a cup of tea.

Subscriber remained at home: yes

Subscriber went to hospital:

Other (explain):

Date of report: November 14, 1988.

Emergency Response Center Operator on duty
FORWARD TO PROGRAM COORDINATOR AT ONC

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APPENDIX D

QUESTIONNAIRE AND SUMMARY OF RESULTS

LIFELINE QUESTIONNAIRE

HELLO, (CLIENT NAME) MY NAME IS (INTERVIEWER). I AM A VOLUNTEER WITH BETHANY LIFELINE. WE ARE TAKING A SURVEY OF OUR LIFELINE CLIENTS TO GET YOUR OPINION ON HOW WELL THE SERVICE IS WORKING FOR YOU. COULD YOU PLEASE HELP US BY TAKING A FEW MINUTES TO ANSWER A FEW SIMPLE QUESTIONS?

* * * * * * * * *

1. Have you ever used the system to call for assistance? Yes No

   If "yes" - approximately how many times? _____ times

2. What do you like most about Lifeline?

   _____

   _____

   _____

3. What do you like least about Lifeline?

   _____

   _____

   _____

4. Do you wear your lifeline locket at all times? Yes No

   If "no" - why not?

   _____

   _____

   _____

5. I WILL NOW READ YOU A SHORT LIST OF STATEMENTS ABOUT LIFELINE. PLEASE RESPOND AS TO WHETHER YOU AGREE, OR DISAGREE, OR ARE UNSURE:

   NOTES

   5.1 In general, Lifeline provides me with a better overall quality of life Agree Disagree Unsure _____

NOTES

5.2 Lifeline makes me feel more secure in my residence — Agree Disagree Unsure

5.3 Lifeline allows me to live more independently — Agree Disagree Unsure

5.4 I like the immediate human contact that Lifeline can provide — Agree Disagree Unsure

5.5 Lifeline can provide me with faster response to emergencies than any other source — Agree Disagree Unsure

5.6 People are more content knowing their elderly friends or relatives are on Lifeline — Agree Disagree Unsure

5.7 Lifeline is simple to use — Agree Disagree Unsure

NOTES

5.8 Lifeline is NOT an invasion of my privacy — Agree Disagree Unsure

PILOT LODGE RESIDENTS ONLY

I WILL NOW READ YOU A FEW STATEMENTS REGARDING LIFELINE IN LODGES. PLEASE RESPOND AS TO WHETHER YOU AGREE, OR DISAGREE, OR ARE UNSURE:

5.9 Lifeline can provide better emergency coverage in a lodge during the night — Agree Disagree Unsure

5.10 Lifeline can help prevent you moving from a lodge to a nursing home or auxiliary hospital — Agree Disagree Unsure

If respondent answers "Agree" ask WHY?

_____

_____

_____

5.11 The lodge should continue the Lifeline system after the pilot study is complete — Agree Disagree Unsure

NOTES

5.12 There should be a charge for Lifeline Agree Disagree Unsure _____

ALL RESPONDENTS

THE FINAL QUESTION WE HAVE FOR YOU IS THIS:

6.0 Who should pay the Lifeline cost? _____

EQUIPMENT:

Government _____

Individual _____

Shared Cost _____

Other _____

MONITORING COSTS:

Government _____

Individual _____

Share Cost _____

Other _____

THANK YOU FOR YOUR ASSISTANCE.

NOTE TO INTERVIEWER

Based on your perception of the ability of the respondent to understand and reasonably assess the questions put forward, would you recommend using this data in our study?

Yes No

If "No", why not?

_____

_____

_____

_____

PILOT SURVEY

(Rundle and Shouldice combined)

Total Number of Respondents 54

Number of Male 17 — Percentage Male 31%

Number of Female 37 — Percentage Female 69%

Number with Disabilities 18 — Percentage with Disabilities 34%

AGE

Number in each category

< 50	50-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90	91-95	> 95
0	0	0	0	3	3	16	9	11	9	2

Average Age of total 81.67

- How long on lifeline? = Average number of months 5.0 mos.
- How many have used system for assistance #3 6%
- Like most about Lifeline:

#1	Security/Safety	16	30%
#2	Help	6	11%
#3	Comfort	2	4%
#4	Need	5	9%
#5	Convenience	1	2%
#6	Useful	1	2%

- Like least about lifeline:

#1	Cost	1	2%
#2	Slow	1	2%
#3	Awkward/Wearing it/Limiting	3	6%
#4	Locket	1	2%
#5	Not necessary	1	2%
#6	Location	2	4%

- Wear lifeline locket at all times

Yes	#2	4%
No	#52	96%

RESPONSES TO QUESTIONS

QUESTIONS	AGREE #	AGREE %	DISAGREE #	DISAGREE %	UNSURE #	UNSURE %
5.1	17	31	23	43	14	26
5.2	30	56	18	33	6	11
5.3	19	35	26	48	9	17
5.4	31	57	11	20	12	23
5.5	31	57	13	24	10	19
5.6	27	50	8	15	19	35
5.7	49	91	0	0	5	9
5.8	45	84	5	9	4	7
5.9	41	76	9	17	4	7
5.10A	7	13	40	74	7	13
5.11	30	56	10	18	14	26
5.12	33	61	11	20	10	19

6.0 EQUIPMENT MONITORING

GOVT	#23	43%	#23	43%
INDIVIDUAL	# 7	13%	# 6	11%
SHARED	#18	33%	#20	37%
OTHER	# 6	11%	# 5	9%

NON-PILOT SURVEY

Total Number of Respondents 60

Number of Male	9	Percentage Male	15%
Number of Female	51	Percentage Female	85%
Number with Disabilities	39	Percentage with Disabilities	65%

AGE

Number in each category

< 50	50-55	56-60	61-65	66-70	71-75	76-80	81-85	86-90	91-95	> 95
2	1	3	1	2	6	9	9	6	7	0

Average Age of total 77.20

- How long on lifeline? = Average number of months 18.5 mos.
- How many have used system for assistance #10 17%
- Like most about Lifeline:

#1	Security/Safety	42	60%
#2	Help/Assistance	14	23%
#3	Peace of Mind/Comfort	12	20%
#4	People	4	7%
#5	Need	4	7%
#6	Independence	3	5%
#7	Confidence	2	3%
#8	Response	2	3%
#9	Convenience	1	2%
#10	Reliability	1	2%

- Like least about lifeline:

#1	Chain	17	28%
#2	Reset	10	16%
#3	Size	6	10%

- Wear lifeline locket at all times

Yes	#41	67%
No	#19	32%

RESPONSES TO QUESTIONS

QUESTIONS	AGREE #	AGREE %	DISAGREE #	DISAGREE %	UNSURE #	UNSURE %
5.1	46	77	3	5	11	18
5.2	56	93	2	3	2	3
5.3	50	83	3	5	7	12
5.4	52	87	1	2	7	12
5.5	49	82	1	2	10	17
5.6	58	97	0	0	2	3
5.7	60	100	0	0	0	0
5.8	55	92	1	2	4	7

6.0	EQUIPMENT			MONITORING	
	GOVT	#15	25%	#12	20%
	INDIVIDUAL	#13	22%	#21	36%
	SHARED	#17	28%	#17	28%
	OTHER	#15	25%	#10	16%

RUNDLE RESIDENTS

RESPONSES TO QUESTIONS

QUESTIONS	AGREE #	AGREE %	DISAGREE #	DISAGREE %	UNSURE #	UNSURE %
5.1	13	36	13	36	10	28
5.2	22	61	11	31	3	8
5.3	13	36	17	47	6	17
5.4	22	61	5	14	9	25
5.5	21	58	7	19	8	22
5.6	16	44	6	17	14	39
5.7	31	86	0	0	5	14
5.8	28	78	5	14	3	8
5.9	29	81	3	8	4	11
5.10A	6	17	28	78	2	6
5.11	21	58	5	14	10	28
5.12	24	67	6	17	6	17

6.0

EQUIPMENT			MONITORING	
GOVT	#18	50%	#18	50%
INDIVIDUAL	# 2	6%	# 2	6%
SHARED	#11	31%	#12	33%
OTHER	# 5	14%	# 4	11%

SHOULDICE RESIDENTS

RESPONSES TO QUESTIONS

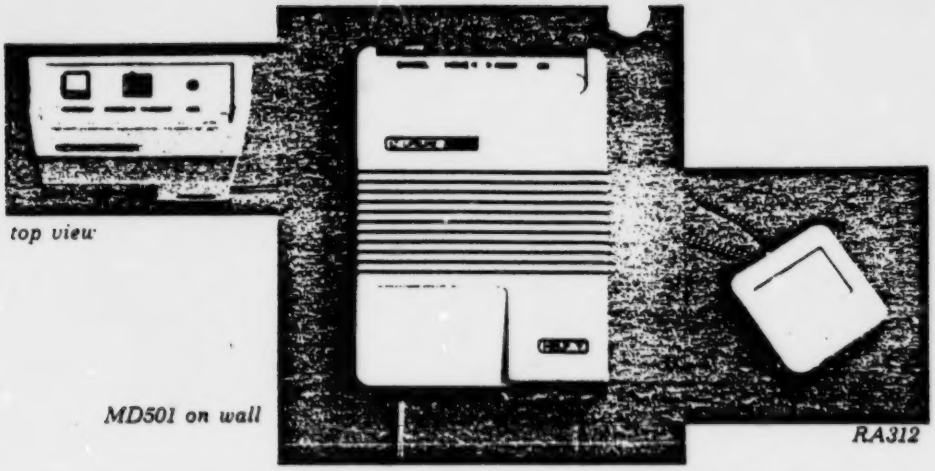
QUESTIONS	AGREE #	AGREE %	DISAGREE #	DISAGREE %	UNSURE #	UNSURE %
5.1	4	24	9	53	4	24
5.2	8	47	6	35	3	18
5.3	6	35	8	47	3	18
5.4	9	53	5	29	3	18
5.5	10	59	5	29	2	12
5.6	11	65	1	6	5	29
5.7	17	100	0	0	0	0
5.8	16	94	0	0	1	6
5.9	12	71	5	29	0	0
5.10A	1	6	11	65	5	29
5.11	8	47	5	29	4	24
5.12	9	53	2	12	6	35

6.0

EQUIPMENT			MONITORING	
GOVT	#4	24%	#4	24%
INDIVIDUAL	#5	29%	#4	24%
SHARED	#7	41%	#8	47%
OTHER	#1	6%	#1	6%

APPENDIX E

BROCHURE AND TECHNICAL SPECIFICATIONS



top view

MD501 on wall

RA312

Model MD501/Model MD502

LIFELINE® PERSONAL EMERGENCY RESPONSE SYSTEM FOR MULTIPLE DWELLING ENVIRONMENTS

The Lifeline® Personal Emergency Response System for multiple dwelling environments allows developers and managers of retirement housing to market an important service to their residents. The Lifeline System enables individuals to live with freedom in their own apartments or condominiums while having access to assistance 24 hours a day. This system consists of the MD501 wall unit, the RA312 portable HELP button, and the RC400 Emergency Response Center. The HELP button transmits "HELP" signals from anywhere in the apartment to the Response Center located either within the community or at Lifeline Central . A responder can then be dispatched to provide assistance. The MD502 Common Area Communicator extends this system to selected common areas.

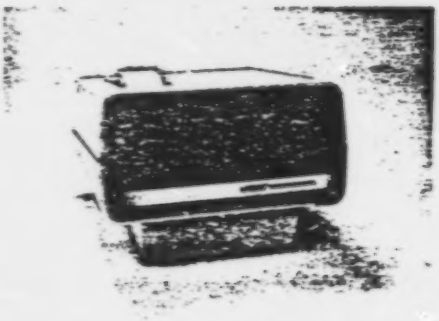
Features and Benefits

- State-of-the-art wireless Surface Acoustic Wave Technology.
  A HELP signal can be transmitted from anywhere in the apartment; the restrictions of a traditional pull-cord system are overcome.
- Small, portable HELP button.
  Can be worn easily by the resident as a necklace or watch band. Additional button can be applied to the bathroom/bedroom walls with velcro backing for additional protection.
- Pre-alarm cancel feature.
  Offers self-test capability and saves management time.
- Battery backup.
  Provides continuous power in the event of loss of electricity. Automatic recharging from the AC line.
- Low profile wall unit.
  For both new construction and retrofit. Can be integrated easily within the apartment.
- Simple-to-use design.
  Simplifies training of residents and monitoring personnel.
- Inactivity Alarm.
  Provides passive monitoring for complete confidence.
- Unique common area configuration.
  Can also be used in indoor or outdoor common areas, such as laundry room, woodworking shop, jogging track, golf course, etc. Not only identifies the person but also his/her location.
- Fully integrated system.
  No additional wiring. Interfaces with standard phone line and standard wall outlet.
- Optional smoke capability.
  Wireless photo-electric smoke detector for additional protection within each apartment.
- Community outreach potential.
  Allows the development of a public relations marketing program which extends into the surrounding community.
- Manufactured by Lifeline Systems, Inc.
  Backed by over 12 years of reliability and service.

LIFELINE IN THE MULTIPLE DWELLING ENVIRONMENT

The MD501 is a wireless personal emergency system designed for apartment buildings, condominiums, and other types of elderly housing. From anywhere within the apartment, an individual can push the portable HELP button (necklace watchband), and the monitoring center within the complex or at Lifeline Central™ will be notified. The apartment unit indicates to the resident that the signal has been transmitted and received by the center.

The MD501 transmits a signal via phone line to the RC400 Emergency Response Center either within the complex or at Lifeline Central™. The emergency response center receives the message and generates a record for the monitoring staff. The staff member attempts to contact the resident by phone. If unsuccessful, a "responder" is dispatched to provide assistance. The responder is either someone on staff at the complex or a neighbor or friend designated by the resident. The CANCEL button is used to reset the unit after the emergency is handled.



MD501 SPECIFICATIONS

SIZE
Length = 8.5" (22.6 cm.)
Width = 6.25" (16.0 cm.)
Depth = 1.9" (4.9 cm)

WEIGHT
1.5 lbs. (736 g)

LINE REQUIREMENTS
117 VAC ±10%, 60 Hz

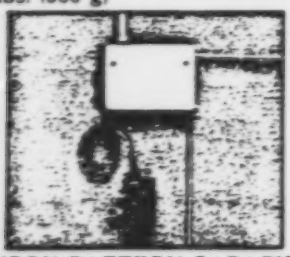
POWER UNIT
2.7VA via class 2UL listed AC/DC Adapter with integral plug; CSA approved.

TELEPHONE CONNECTOR
Modular plug for connection to a modular extension jack.

INACTIVITY
24 hour.

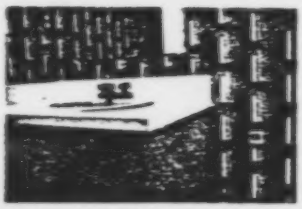
BATTERY BACK-UP SPECIFICATIONS
SIZE
Width = 3.25" (8.3 cm.)
Height = 4.5" (11.4 cm.)
Depth = 1.25" (3.2 cm.)

1.25 lbs. (560 g)



STANDBY BATTERY CAPACITY
8 hours minimum backup supply: Continuous charging when AC power available.

RA312 SPECIFICATIONS



Additional HELP buttons can be attached to walls in the bathroom, bedroom, etc., with Velcro backing.

FREQUENCY
312 MHz

MODULATION
AM, Digitally Encoded

SIZE
Width = 1.8" (4.5 cm.)
Height = 0.6" (1.6 cm.)
Depth = 1.8" (4.6 cm.)

WEIGHT
1.0 oz. (28 g)

OPERATING TEMPERATURE
32°F (0°C) to 120°F (49°C)

POWER
Internal lithium battery with nominal 5-year life expectancy.

TRANSMISSION RANGE (SYSTEM)
75 Feet (23 Meters), unobstructed.

RC400 SPECIFICATIONS

SIZE
Width = 15.9" (40.3 cm.)
Height = 11.7" (29.71 cm.)
Depth = 17.2" (43.68 cm.)

WEIGHT
41 lbs. 10 oz. (18.9 kg)

POWER REQUIREMENTS
105-125 VAC, 50-60 Hertz, 120 Watts; NEMA 5-15R.

BATTERY
Four 6V, 6AH sealed gelled electrolyte.

BATTERY CAPACITY
Standby battery with 12-hour capacity upon loss of AC power.

TELEPHONE LINE JACK REQUIREMENT
Main: USOC RJ11C
Backup: USOC RJ11C (for optional phone line).

DATA INTERFACES
RS232; 25 pin D Connector.

WARRANTY
RC400 = 1 year
MD501/RA312 = 90 days

MINIMUM QUANTITY PURCHASE
The MD501/RA312 system is available in lots of 10, with 100 units minimum; single delivery.

For additional information

– CALL OR WRITE –

Lifeline Systems, Inc.
One Arsenal Marketplace
Watertown, Massachusetts 02172
(800) 451-0525

In Massachusetts and outside continental U.S. use:
(617) 923-4141

Canada
(800) 521-6870

APPENDIX F

LODGE STAFF JOB DESCRIPTIONS

JOB DESCRIPTION

TITLE - NIGHT SUPERVISOR

FUNCTION

The night supervisor assumes the responsibilities for the operation of the entire lodge during the hours of 12:00 midnight untill 8 a.m. She is directly responsible to the residence manager of her assigned lodge.

RESPONSIBILITIES

1. Responsible for the security of the assigned lodge.
2. Responsible for the health and safety of the residents in the assigned lodge.
3. Responsible for documentation and communication of all problems or problem areas that are identified during her work shift.
4. Responsible to assist in the preparation for special events, meals, etc.
5. Responsible to function as a member of the staff team in the provision of a high quality of services for the residents of the assigned senior citizens lodge.
6. Responsible for other tasks as assigned.

QUALIFICATIONS

1. Good health - a medical may be required.
2. A flexible, willing, and positive attitude.
3. A high standard of hygiene and personal appearance.
4. A willingness to take special courses such as St. John's Ambulance course, and course in Cardiac Pulmonary Resuscitation.

METROPOLITAN CALGARY FOUNDATION

JOB DESCRIPTION

TITLE - EVENING PERSON

JOB FUNCTION

The Evening Person assumes the responsibility for the operation of the entire lodge during the hours of 4:00 p.m. until 12:00 midnight. She is directly responsible to the Residence Supervisor of her assigned lodge.

RESPONSIBILITIES

1. Responsible for the security of the assigned lodge. ✓
2. Responsible for the health and safety of the residents in the assigned lodge, and must be thoroughly aware of all emergency procedures. ✓
3. Responsible for documentation and communication of all problems or problem areas that are identified during her work shift. ✓
4. Responsible to assist in the preparation for special events, meals, etc.
5. Responsible to function as a member of the staff team in the provision of a high qaulity of services for the residents of the assigned seniors lodge.
6. Responsible to promote actively recreational activities among the residents during the assigned shift.
7. Responsible for other tasks as assigned.

QUALIFICATIONS

1. Good health - a medical may be required.
2. A flexible, willing, and positive attitude, with the capacity to assume responsibility.
3. A high standard of hygiene and personal appearance.
4. A willingness to take special courses, such as St. John's Ambulance course, and a course in Cardiac Pulmonary Resuscitation.

APPENDIX G

LIFELINE PROGRAMS IN ALBERTA

LIFELINE PROGRAMS IN ALBERTA

Appendix G

NAME	ADDRESS
Airdrie Lioness	307 - 1st Avenue S.E. Airdrie, Alberta T4B 1H6
Alliance Lifeline	Box 62 Alliance, Alberta TOB 0A0
FCSS	Box 1835 Banff, Alberta TOL 0C0
Carstairs Lions Lifeline	Box 333 Carstairs, Alberta TOM 0N0
Castor Lifeline	Castor, Alberta Box 738 TOC 0X0
Vulcan Lifeline	Box 175 Vulcan, Alberta TOL 2B0
Fort Macleod Lifeline	Box 775 Fort Macleod, Alberta TOL 0Z0

Appendix G

NAME	ADDRESS
Hanna Lifeline	Hanna Health Unit P.O. Box 279 Hanna, Alberta T0J 1P0
Madden Lifeline	R.R. 1 Airdrie, Alberta T4B 2A3
Oyen Lifeline Community Project	Box 163 Oyen, Alberta T0J 2J0
Strathmore Lions Lifeline	Strathmore, Alberta T0J 3H0
Turner Valley Satellite Program	Oilfields General Hospital P.O. Bag #1 Black Diamond, Alberta T0L 0H0
Boyle General Hospital Dist. No. 1	P.O. Box 330 Boyle, Alberta T0A 0M0

Appendix G

NAME	ADDRESS
Cardston Municipal Hospital	150 - 1 Avenue West Cardston, Alberta T0K 0K0
Royal Alexandra Hospital	10240 Kingsway Edmonton, Alberta T5H 3V9
The Good Samaritan Society	4225 - 107th Street P.O. Box 8190 Edmonton, Alberta T6H 5A2
St. John's Hospital	4716 - 5 Avenue East Edson, Alberta T0E 0P0
Fort McMurray Regional Hospital	7 Hospital Street Fort McMurray, Alberta T9H 1P2
Hinton Hospital	1280 Switzer Drive Hinton, Alberta T0E 1B0

Appendix G

NAME	ADDRESS
Seton General Hospital	518 Robson Street Jasper, Alberta TOE 1E0
Lacombe Lifeline Association	5211 - 50 Avenue Lacombe, Alberta TOC 1S0
Lacombe Community Health Care Centre	5430 - 47 Avenue Lacombe, Alberta TOC 1S0
Lethbridge Lifeline Association	Box 1863 Lethbridge, Alberta T1J 1W5
Lethbridge Regional Hospital	1802 - 9 Avenue South Lethbridge, Alberta T1J 1W5
Border Countries General Hospital	P.O. Box 90 Milk River, Alberta TOK 1MO

Appendix G

NAME	ADDRESS
Olds Lifeline Committee	Box 2857 5110 - 50 Street Olds, Alberta TOM 1PO
Raymond General Hospital	150 North, 400 East P.O. Box 599 Raymond, Alberta TOK 2SO
Red Deer Regional Hospital Center	3942 - 50A Avenue P.O. Bag 5030 Red Deer, Alberta T4N 4E7
Vegreville Health Unit	Box 99 Vegreville, Alberta TOB 4LO
St. Joseph's Lifeline Programme	5241 - 43rd Street Vegreville, Alberta TOB 4LO